UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

OPP OFFICIAL RECORD
HEALTH EFFECTS DIVISION
SCIENTIFIC DATA REVIEWS
EPA SERIES 361

MEMORANDUM

Date: 16-May-2006

Subject: (2,4-Dichlorophenoxy)acetic acid (2,4-D acid) and 3,6-Dichlorophenoxyacetic acid (Dicamba Acid) in/on Pastures, Rangeland, and Grass (hay or silage); Sorghum; Wheat; and Cotton (preplant); and for Postharvest (fallow, crop stubble, and set aside acres), Noncrop Area, and Forest Management Purposes. **Review of Amendment Dated 17-May-2006 Submitted in Response to Residue Chemistry Deficiencies Identified in D313211 (T. Bloem, 20-April-2005).**

DP Barcode:	328741	Registration No.:	42750-RNN- BWII
PC Code:	2,4-D - 030001 Dicamba - 029801	40 CFR.	2,4-D – 180.142 Dicamba – 180.227
Decision No.:	351949	MRIDs	None

From: Tom Bloem, Chemist
Health Effects Division; Registration Action Branch 1 (HED/RAB1; 7509C)

Through: PV Shah, Ph.D., Branch Senior Scientist
HED/RAB1 (7509C)

To: Dianne Morgan (RM 23)
Registration Division (7505C)

Albaugh, Inc (Ankeny, IA) requested registration for application of BWII (EPA Reg. No. 42750-RNN) to pastures, rangeland, and grass; sorghum; wheat; and cotton (preplant) and for postharvest (fallow, crop stubble, and set aside acres); noncrop area; and forest management purposes. BWII is a new liquid formulation (type not indicated) containing 1.8 lbs dicamba acid per gallon and 2.4 lbs 2,4-D acid per gallon. In support of this request, the petitioner cited the currently-registered Outlaw label (EPA Reg. No. 42750-68) which contains 1.09 lbs dicamba acid per gallon and 1.45 lbs 2,4-D acid per gallon (present as the 2-ethylhexyl ester of 2,4-D). The petitioner stated that the application scenarios included in BWII were similar to those included on the Outlaw label with the exception of substituting the 2,4-D acid for the 2,4-D ester. HED reviewed the residue chemistry data submitted in support of this request (D313211, T. Bloem, 20-Apr-2005). Several residue chemistry deficiencies were identified and the petitioner has subsequently submitted additional information concerning the residue chemistry deficiencies (e-mail from M. Gaskin (Albaugh Inc.) to Dianne Morgan (EPA/RD); 17-May-2006). The current memorandum is HED's review of these data.

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Executive Summary

The material submitted by Albaugh, Inc (Ankeny, IA) adequately addresses all of the previously-identified residue chemistry deficiencies. The application scenarios included in the BWII label are nearly identical to the registered application scenarios (Outlaw™ (EPA Reg. No. 42750-68; inconsequential differences in application rate) and the currently-established plant/livestock 2,4-D (40 CFR 180.142) and dicamba (40 CFR 180.227) tolerances are sufficient to cover the proposed uses.

Detailed Considerations

The petitioner submitted a revised label, via e-mail, on 17-May-2006 (E-mail from M. Gaskin (Albaugh Inc.) to Dianne Morgan (EPA/RD).

Deficiency OPPTS 860.1200 – Directions for Use (D313211, T. Bloem, 20-Apr-2005)

Submission of a revised Section B with the following changes:

- the statement "between crop applications/fallow systems" in the pasture, rangeland, and grass (hay and silage) section amended to "fallow systems"
- addition of a statement prohibiting tank mixing BWII with products which contain 2,4-D and/or dicamba; alternately, the petitioner may include instructions indicating that when tank mixing BWII with products which contain dicamba and/or 2,4-D, the total application rate of 2,4-D and/or dicamba in lbs ai/acre must conform to the lowest of the two labeled rates
- maximum single application rate to noncrop areas amended to indicate 1.45 lbs 2,4-D acid per acre and 1.09 lbs dicamba acid per acre
- following application at rates >0.8 lbs dicamba acid per acre, only the following crops may be rotated (petitioner may specify the plantback intervals (PBIs) for these crops): corn, soybeans, cotton, wheat, barley, oats, grass pasture and hay or rangeland, sorghum, asparagus, and sugarcane
- the cotton preplant application scenario amended to specify rates of 0.33 lbs 2,4-D acid per acre and 0.25 lbs dicamba acid per acre and a preplant interval of 21 days

HED is requesting that the petitioner alter the proposed cotton preplant application scenario to conform with the HED-approved rate; as a condition of this registration, HED requested cotton gin byproduct dicamba residue data (D220430, F. Griffith, 2-May-1996; D228694, S. Chun, 25-Jun-1998; D249098, W. Donovan, 13-Oct-1998).

If the petitioner wishes to register the proposed rate, then cotton gin byproduct and cottonseed dicamba residue data should be submitted reflecting the currently-registered dicamba fall pre-plant application scenario (2.0 lbs dicamba acid per acre; cotton planted the following spring) and the proposed spring application scenario (1 x 0.88 lbs dicamba acid per acre; 30 days prior to planting).

Petitioner's Response 17-May-2006: Revised Section B.

HED's Conclusion: The petitioner has made the requested changes to the proposed label. The plantback intervals specified on the revised label conform to those previously recommended for 2,4-D and dicamba (D312086, G. Kramer, 10-Mar-2005). This deficiency is now resolved.

OPPTS 860.1500 – Crop Field Trials (D313211, T. Bloem, 20-Apr-2005)

Since the proposed application scenarios (excluding cotton; see below) are identical to currently-registered application scenarios, HED concludes that the currently-established tolerances are acceptable.

The petitioner initially received registration for preplant application of dicamba sodium salt to cotton as follows (Banvel SGF7; EPA Reg. No. 55497-28): broadcast application at 2 lbs ai/acre after harvest and before a killing frost (cotton may be planted in the spring following application made the previous year). Following this, HED approved the following addition preplant application of dicamba sodium salt to cotton (D220430, F. Griffith, 2-May-1996; D228694, S. Chun, 25-Jun-1998; D249098, W. Donovan, 13-Oct-1998): broadcast application at 0.25 lbs ai/acre 21 days prior to planting cotton. As part of the latter registration, HED requested cotton gin byproduct residue data reflecting the 2 lbs ai/acre post-harvest application (when this application scenario was approved, cotton gin byproduct was not considered a feed commodity and residue data were not submitted; cotton gin byproduct residue data reflecting the 0.25 lbs ai/acre application 21 days prior to harvest are available). As of the writing of this document, HED has not received the cotton gin byproduct residue data. Currently, the petitioner is requesting preplant application of dicamba acid to cotton at 0.22-0.82 lbs ai/acre 30 days prior to planting.

Provided the preplant application scenario for cotton is altered to conform with previously agreed rate (0.25 lbs dicamba acid per acre and a preplant interval of 21 days) and the petitioner agrees to submit the requested cotton gin byproduct residue data (D220430, F. Griffith, 2-May-1996; D228694, S. Chun, 25-Jun-1998; D249098, W. Donovan, 13-Oct-1998), HED concludes that preplant application to cotton is acceptable. If the petitioner wishes to register the proposed rate, then cotton gin byproduct and cottonseed residue data reflecting the currently-registered dicamba fall pre-plant application scenario (2.0 lbs dicamba acid per acre; cotton planted the following spring) and the proposed spring application scenario (1 x 0.88 lbs dicamba acid per acre; 30 days prior to planting) should be submitted.

HED notes that dicamba cotton gin byproduct residue data are not currently available; therefore, the potential transfer of residues to livestock resulting from application to cotton is unknown. Since dicamba is currently registered for application to grass with forage and hay tolerances of 125 ppm and 200 ppm, respectively, HED concludes that the contribution of cotton gin byproduct to the livestock dietary burden will be minimal. Therefore, prohibiting the feeding of cotton gin byproduct to livestock prior to the submission and review of the residue data is unnecessary.

Petitioner's Response 17-May-2006: none

HED's Conclusion: HED notes that the petitioner is now proposing application to fallow ground prior to planting cotton. The petitioner proposed rates of 1-3.66 pints of BWII per acre (0.22-0.82 lbs dicamba acid/acre; 0.30-1.1 lbs 2,4-D acid/acre). The label indicates a 120-day plantback interval for cotton following application at rates >3.5 pints of BWII per acre (0.79 lbs dicamba acid/acre; 1.0 lbs 2,4-D acid/acre) and a plantback interval of 21-90 days following application at rates <3.5 pints of BWII per acre (plant-back interval was dependent on application rate and quantity of rainfall or irrigation following application). These plantback intervals conform to those previously recommended for 2,4-D and dicamba (D312086, G. Kramer, 10-Mar-2005). Since the proposed use is for application to fallow ground prior to the planting of cotton and is not a preplant application scenario, the field trial data previously requested are no longer necessary. The plantback intervals specified by the petitioner are appropriate. This deficiency is no longer applicable.

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	PC Code: **030001** **029801**
HED File Code:	**11000 Chemistry Reviews**
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